PROPERTY OF THE JEFFERSON
COUNTY MEDICAL LIBRARY.

THE

LOUISVILLE MEDICAL NEWS.

"NEC TENUI PENNÂ."

SATURDAY, APRIL 28, 1883.

Original.

LECTURES ON FRACTURES.

Delivered in the Post-Graduate Course of the Medical Department of the University of Louisville. Session of 1883.

BY L. S. M'MURTRY, A.M., M.D.

I. GENERAL CONSIDERATIONS.

Gentlemen: The treatment of fractures is one of the most common duties of the general practitioner. Almost every practitioner has treated a number of broken bones. Yet there is the greatest diversity of opinion among surgeons as to the most trivial as well as the most important features of the management of this class of injuries. Volumes have been written upon the subject in various languages, every work on surgery treats of this class of injuries in detail, and yet at this day surgeons differ widely as to the mere time of dressing a fracture, the nature of the dressing, the prognosis in the various fractures, and the results which may be obtained. In consequence of these facts and other matters connected with the treatment of these injuries, this field of surgery has become one of great danger to the practitioner's reputation and peace of mind on account of the frequency of suits for malpractice. All these facts conduce to make the consideration of the nature, diagnosis, prognosis, and treatment of fractures of the utmost importance to the general practitioner.

In this course of lectures it will be our purpose to omit the consideration of all the innumerable methods and apparatus which have been used in the past, and are now used by some surgeons, and to indicate and demonstrate those methods in use at the University Clinic, upon which the profession of this city and the Southwest are quite generally agreed, and in which you can see the results obtained. In all these methods you will observe the important features are, promptness in application, simplicity in arrangement, efficiency in method, and the avoidance of force. These principles of treatment have been accepted by the profession of this region for a number of years, and the adoption of this method of treatment is based on extensive clinical experience.

It is customary to divide the causes of fracture into two classes, predisposing and exciting causes. The predisposing causes relate to the bone itself and the condition of the patient. The situation of the bone and its function may be cited in this connection. Prominent among predisposing causes of fracture are age and sex, and certain diatheses, as cancer, rickets, syphilis, osteomalacia, and scrofula. The real causes of fracture, however, are external violence, either direct or indirect, and muscular action. These are known as exciting causes. Fractures are usually classified as complete or incomplete. The most important classification, however, is the clinical one, which divides these injuries into the varieties known as *simple* and *compound*, or, more definitely, *subcutaneous* and *open*. A simple fracture is one in which there are but two fragments, and which does not communicate by a wound with the external atmosphere. When the soft parts covering the broken bone are torn through so that the fracture communicates by a wound with the external air, it is known as a compound fracture. Besides these varieties, we speak of *comminuted* fractures, in which the bone is broken into several pieces; *complicated* fractures, in which the fracture is associated with other injuries, as strain, injury to a joint, etc.; *multiple*, in which variety the bone involved is the seat of more than one fracture; and *impacted* fractures, meaning those fractures usually of advanced life, in which one fragment is driven into

and fixed in the other. Relating to direction of fracture, these injuries are classified as *transverse, oblique, and longitudinal.* Transverse fractures are very rare, and longitudinal fractures are almost invariably the result of gun-shot wounds. So, practically, we have to deal for the most part with oblique fractures.

The symptoms of fracture may be best considered in a group, for when taken singly all are more or less equivocal and unsatisfactory. It is by their coexistence that they may be regarded as absolutely pathognomonic. Among the more doubtful signs are, *pain, swelling, numbness*, and *ecchymosis.* The more special signs which are peculiar to fracture are, *deformity, preternatural mobility*, and *crepitus.* The deformity is one of the most valuable signs of fracture. In order to appreciate this symptom fully as an element of diagnosis the part should always be stripped and compared with the corresponding points of bone on the opposite side of the body. The physiognomy of certain fractures is so characteristic as to establish the diagnosis, as the deformity of the hand and wrist in fracture of the lower end of the radius. The direction of the displacement may be angular, transverse, or rotary, being determined by the direction of the fracture, the position of the limb, the force involved, and the action of the surrounding muscles. Shortening is a prominent feature of the deformity in fracture of the long bones, and is due to muscular action, when one fragment can slide upon the other as an inclined plane. Mobility is one of the most striking symptoms of fracture, and is a sign of the greatest value when observed in the continuity of a long bone. Indeed, under these circumstances it is pathognomonic. When one of two parallel bones, as in the forearm and leg, is broken, this symptom is not developed. For evident reasons it is usually absent in impacted fractures.

The grating sensation, produced by rubbing together the rough ends of the fragments of the broken bone, more often felt than heard, is known as crepitus. This is a symptom of great importance, and when associated with undue mobility is sufficient to establish the existence of fracture. In incomplete and impacted fracture, for obvious reasons, crepitus is absent. In recent fracture the sensation of crepitus is a most satisfactory diagnostic sign. When heard or felt it is usually unmistakable, and is not apt to be confounded with the grating of diseased joints, the crackling of effusion in the tendinous sheaths and the crepitus of traumatic emphysema.

For the full appreciation of these symptoms in making up a diagnosis the examination should be made as soon as possible after the reception of the injury; and when doubt exists as to the diagnosis, the examination should be made under an anesthetic. In handling a fractured limb, it should be grasped firmly, for by so doing muscular spasm is controlled and no additional pain is inflicted.

In the prognosis of fracture the age of the patient is the most important element. While old age is not absolutely incompatible with the union of fractured bones, these injuries present their greatest difficulties in old subjects. In young and middle-aged subjects the prognosis of simple fracture is always favorable. When the injury is confined to the shaft of the bone, multiple fractures, if simple, do well. The same may be said of comminuted fractures. Fractures in the vicinity of the joints, as of the acromion, olecranon, condyles of femur and patella, and at the hip and elbow, present the great est difficulties in the way of a good result. With the improved methods of treatment now at hand, the prognosis in compound fractures, both as regards the life of the patient and the preservation of the limb, is altogether different from former teachings on this subject. In the most skillful hands, and with the most improved means conscientiously applied, unsatisfactory results may obtain; and in various special fractures the best results are far from perfection. To condemn a practitioner in these matters is as much a mark of ignorance as a want of charity.

To the intelligent management of fractures a knowledge of the process of repair in broken bones is absolutely essential. Here, as elsewhere, surgery directs her efforts toward aiding and supporting the reparative powers of nature. The surgeon places the fragments in apposition, and so retains them until the reparative process welds them in strong and permanent union. No material aid can be given to this process if ignorant of its methods and stages. When a bone is broken the fragments are movable, and, of course, are surrounded at the point of fracture with more or less extravasated blood. In the course of ten days this is for the most part absorbed, and inflammation has begun in the soft parts around, in the periosteum and medullary membrane, and in the bone

itself. The results of inflammation soon appear in the form of a quantity of lymph between and around the fragments. The fractured ends of the bone are ensheathed in a mass of gelatinous material. This lymph becomes firmer day by day, and gradually undergoes ossification. Composed at first of embryonal elements, it soon becomes cartilaginous; then lime salts are deposited, and finally it becomes bone. The periosteum is very active in this process, and the medullary membrane and osseous tissue also participate actively. The new ossific material which surrounds the point of fracture, and which emanates for the most part from the periosteum, is called the *ensheathing callus*. As will be seen, this ensheathing mass is of temporary existence, and hence it is also known as temporary callus. The central callus springing from the medullary membrane is the *pin callus* of the older surgeons. This is all temporary, and subserves the purpose of ensheathing the fractured extremities of bone in a firm manner while the ossific material which is to constitute the permanent bond of union between the fractured surfaces is being deposited. This latter is called the *permanent callus*. The time occupied by this process of repair varies in accordance with the size of the fractured bone, the extent of injury, and other extraneous circumstances. During the first few days after the injury no apparent change is observed in the immediate vicinity of the fracture; but during this period swelling occurs in the soft parts, and the effused blood is being absorbed. The formation of the temporary callus usually begins during the second week after the injury. From the third to the fourth week the lymph has assumed sufficient firmness to prevent displacement of the fragments. The permanent union of the fragments does not occur until a much later period. The exact period of formation of the intermediate callus varies from three to seven months, as a general rule. This permanent callus is formed from the fractured osseous surfaces, and from the nature of this tissue and its blood-supply the process is a slow one. By the time the permanent callus has become firm the temporary callus has been absorbed, except as may be necessary for preserving the integrity of the bone. The medullary canal is also restored by absorption of the pin callus. In cases of compound fracture, and in certain special conditions, the process of union may be modified, and present variations from the course described; yet in all essential features the reparative process follows the steps given. Repair of fractures, like other healing processes, takes place more quickly in the earlier periods of life, and is more speedily accomplished in the upper than in the lower extremities. The importance of a knowledge of the reparative process, as it relates to the union of bone, will be evident when we come to examine the indications for the various steps in the treatment of the forms of injury under consideration.

LOUISVILLE, KY.

Miscellany.

THE AIM OF EXERCISE.—It should be understood by the public, as it is known to the profession, that the aim of exercise is not solely to *work* the organism which is thrown into activity, though that is one, and a very important, part of the object in view, because as the living body works it feeds, and as it feeds it is replenished; but there is another purpose in exercise, and that is to call into action and stimulate the *faculty of recuperation*. (The Lancet.) Those who believe in the existence of a special system, or series, of trophic nerves will not object to this designation of the recuperative function as a separate "faculty," and those who believe nutrition to be effected in and by the ordinary innervation will recognize the sense in which we employ the term in italics. It is through defect or deficiency in the vigor of this faculty unaccustomed feats of strength, whether of mind or muscle, are found to be exhausting. The task is performed, but the underlying faculty of restorative energy, or power of recuperative nutrition, located in the particular part exceptionally exercised is not in a condition to respond to the unusual call made upon it. When a man goes into training, or, which is practically the same thing, when he habituates himself to the performance of a special class of work he so develops this recuperative power or function that the repair or replenishing necessary to restore the integrity and replace the strength of the tissue "used up" in the exercise is instantly performed. The difference between being accustomed to exercise and able to work "without feeling it" and being barely able to accomplish a special task and having it "taken out" of one by the exploit, whether mental or physical, is the difference between possessing the power

of rapid repair by nutrition and not having that power in working order, so that some time must elapse before recovery takes place, and during the interval there will be "fatigue" and more or less exhaustion. The practical value of a recognition of this common-place fact in physiology will be found in the guidance it affords as to the best and most direct way of developing the power or faculty of recuperation by exercise. Many persons make the mistake of doing too much. Exercise with a view to recuperation should never so much exceed the capacity of the recuperative faculty as to prostrate the nervous energy. The work done ought not to produce any great sense of fatigue. If "exhaustion" be experienced, the exercise has been excessive in amount. The best plan to pursue is to begin with a very moderate amount of work, continued during a brief period, and to make the length of the interval between the cessation of exercise and the recovery of a feeling of "freshness" the guide as to the increase of exercise. We do not mean that false sense of revival which is sometimes derived from the recourse to stimulants, but genuine recovery after a brief period of rest and the use of plain nutritious food. If this very simple rule were carried into practice by those who desire "to grow strong," there would be less disappointment and a generally better result than often attends the endeavor to profit by exercise unintelligently employed.

"MAN'S DUTY TO MAN IS GREATER THAN HIS DUTY TO BEASTS."—Dr. Playfair is the author of this epigram, and it concisely embodies and expresses the truth about vivisection. It is, in fact, the law of nature, and of nature's God. When fallen man—according to the story of "Genesis"—resorted to the vegetable kingdom for his clothing, the Creator pointed him to the animal kingdom as the source of supply. The garment of fig-leaves was divinely replaced by a clothing made of the skins of beasts. This was a clear intimation that not simply for food, but for other necessaries, man was to regard the animal creation as under his control and at his command.—*The Lancet.*

MALARIA: ITALY.—A project has been prepared for making the malaria regions in Italy healthy. For this purpose a map has been drawn out, which shows plainly the desolation of the Neapolitan provinces. The malaria regions are divided into three classes, namely, weak, serious, and most serious. Thirteen provinces are classified as having weak malaria, twenty-nine as serious, and twenty-one as most dangerous. The new project will give to the Government the right of expropriating territories lying in the region of the most serious malaria contiguous to the lines of railway, for a distance of two hundred meters on each side, unless the proprietors have themselves undertaken the work of improvement. For ten years from the passing of the law, prizes and indemnifications will be granted to any one in the circle of malaria who makes a plantation of eucalyptus trees. The Government provinces and communes are also authorized to grant subsidies. All proposals to sanitary works will be examined by an executive committee.—*London Medical Times and Gazette.*

FRENCH BRANDY.—In a recent return of the French Minister of Agriculture on the wines of 1882, it appears that the vineyards of the two Charentes, which alone supply the genuine wine brandy, are irretrievably ruined. These two departments, which were devoted almost wholly to grape-culture, gave three hundred and eleven million gallons of wine in 1875. Last year they only gave one-eighth of that quantity, being a falling off of two hundred and seventy-three million gallons, and the quality was execrable. The condition of Charante proper, which produced the true cognac, is even worse, for the vintage—if it can still be called so—only gave the twenty-second part of the yield of 1875, and the ravages of the phylloxera are each successive year going from bad to worse. In fact, the pest has now utterly destroyed, throughout France, nearly two million acres of vineyards.

CURE OF SQUINT WITHOUT OPERATION.—In the early stages of a convergent strabismus, before the internal rectus muscle is permanently contracted, Dr. Boucheron (*Schmidt's Jarbücher*, January 17, 1883) claims that a cure is possible without operation. He states that, as a convergence is caused by efforts of accommodation for near objects, if we take away the power of accommodation squint will not occur. He maintains a constant mydriasis by the instillation of atropine night and morning. A cure is usually obtained in two or three weeks. If atropine is not well borne, other mydriatics, such as duboisia, may be used. In nine cases of intermittent strabismus the author obtained eight cures by this method.—*Medical Record.*

SLOW PULSE.—Dr. W. T. Harris, of Brantford, Ontario, Canada, writes: "In the Record, last summer, I saw referred to a remarkably slow pulse, thirty six per minute. Last October I saw a gentleman in perfect health with a pulse of thirty-one per minute, and the same case I saw again last week, and found his pulse thirty-three per minute in the sitting posture. This man is sixty-eight years of age, and has always been perfectly healthy. He is a farmer residing in the vicinity of this city."—*Medical Record.*

SYPHILIS IN AMERICA.—The Philadelphia Medical Times says: It has been estimated that two millions of people in this country, out of a population of fifty millions, are affected by some form of syphilis, and "that thirty thousand males are daily infected with venereal poison in the cities of the United States, a large proportion of whom are residents of inland and country towns, whither they return to spread the contagion."

M. PASTEUR has written from Vaucluse, where he now is, to the Medical Academy at Paris, to say that he has found the cause of the disease in pigs, which in the valley of the Rhone alone killed 20,000 animals lately. The disease is caused by a very minute microbe, resembling that which causes cholera in fowls, but it differs in physiological properties, being quite harmless to these latter animals, although it kills rabbits and pigs, particularly white ones. M. Pasteur succeeded in inoculating pigs with microbes obtained by artificial means, and thus preventing their ever having this disease.—*Medical Press.*

EMIGRATION.—No less than 279,336 inhabitants of the British isles left home for our shores during 1882. This shows an increase of 20,774 on the previous year, and the increase is chiefly made up of persons of English and Scotch nationality. One peculiar feature of the emigration from England is that nearly three adult males go away for every adult female.

THE MARYLAND MEDICAL JOURNAL.—Hereafter the Maryland Medical Journal will be issued as a weekly, appearing every Thursday. It will contain sixteen pages, double column. The size and appearance of the Journal will be slightly altered to conform to the requirements of a weekly. Drs. Thomas A. Ashby and Eugene F. Cordell, the editors of this excellent Journal, deserve success. Monthlies, ere long, will exist only in memory.

"GOOD TEMPLARS' SPARKLING CHAMPAGNE," largely sold for the use of teetotallers in England, has been found to contain twenty-five per cent of proof spirit. Of samples of non-alcoholic sacramental wine analyzed, one contained eighteen per cent of proof spirit, another ten per cent.—*Canadian Pharmacist.*

THE LATEST WORK ON DERMATOLOGY.—Hyde on the Skin would have been a more telling title than "Diseases of the Skin—Hyde," as appears on the back of this book. England has long had her Hunt on the skin and now America has her Hyde on the skin. The latter sounds doubly appropriate.

THREE deaths from chloroform have occurred in Baltimore since October, 1882; and the wife of a prominent physician of Portsmouth, Va., died, March 9th, from the effects of chloroform administered previous to the extraction of some of her teeth.

PADDY AGAIN.—When a gentleman at a banquet was speaking of a friend of his who had the smallpox twice, and died of it, an Irishman who was present inquired whether the man died of the first or of the second attack.—*Medical Times and Gazette.*

EQUITATION AS PREVENTIVE AND CURE OF HEMORRHOIDS.—This is what a New York specialist of the lower regions calls horseback-riding. In the older books we read that horseback exercise is provocative of piles.

A PORCINE PARASITE.—At a late meeting of the Linnean Society of London, Dr. Cobbold described a worm which he called Simondsia paradoxa. It is a nematode, the male living free in the stomach of the hog, while the female is lodged in cysts within the walls of the stomach.—*The Lancet.*

THE much talked of laying-on-of-hands cure is nothing remarkable. Myriads of small boys have been cured of infirmities in that way, and rarely has the boy been found possessed of sufficient bottom to withstand the treatment.—*Newspaper.*

LONDON, in 1881, had 1,607⅝ miles of streets.

A CASE of poisoning by citrate of caffeine has just been reported to the Medical Society of London by Dr. Routh. The drug had been prescribed in dram doses three times a day for severe headache in a man under treatment for debility. Bishop's effervescent preparation was intended, but the pure drug was used. Fifty minutes after taking one powder he complained of burning in the throat, and giddiness; there was vomiting and purging with pain in the belly. He then became almost paralyzed, and was affected with tremors, but his intellect was clear. Dr. Routh found him an hour later collapsed; pulse about 120. Ipecacuanha was given as an emetic, but failing to act, some animal charcoal, with nitrite of amyl and ether, was given. Vomiting subsequently took place, and ammonia, alcohol and nitro-glycerine were given. For some hours he remained much depressed, and did not rally completely till 1.30 A.M. next day, or nine hours after taking the caffeine. Nitro-glycerine in one minim doses was given every two hours, with digitalis, and in about three days he recovered to his former state.

OBJECTIONABLE ANESTHESIA.—The other day a rural female went into a shoe-store to buy a pair of shoes. The clerk was in the act of sprinkling some chalk-powder inside, that they might slip on easily. She glanced furtively at him and remarked: "I know what you are doing." The genial clerk smiled acquiescence. She slid toward the door, and said, in tones that startled his nerves: "You can't chloroform me, mister; I was fooled once before, and I'm blamed if I'll be again." And she left without the shoes.—*Cincinnati Lancet and Clinic.*

AN artificial white slate with black pencil, or pen and ink, for school children is recommended by Professor H. Cohn, of Breslau, instead of the ordinary slate, as he believes the latter tends to produce short-sightedness. The school board of Zurich has forbidden the use of slates after the primary year, and the use of white boards instead of black boards has been advocated both by teachers and oculists.—*Scientific American.*

FLATULENCE and fluttering at the pit of the stomach, often so distressing to women, are relieved (New York Medical Journal) by one-fiftieth of a grain of extract of calabar bean repeated every half hour for six or eight doses.

GRAY'S ANATOMY, of which we have received the tenth edition, edited by Mr. Pick, has attained the position of a classic. Mr. Pick has been at pains, by additional illustrations, and the investigation of points of anatomy as to which differences of opinion exist, to bring this edition into harmony with the latest anatomical researches.

A RIDICULOUS SUIT has been begun against two of Chicago's most esteemed oculists by a tramp, who accuses them of serious damage done to one of his optics by use of nitrate of silver, which was directed to some lid-trouble from which he was suffering. But one or two very mild applications were made; the tramp entirely neglected all precautions, and the treatment was purely gratuitous. The man subsequently fell into the hands of a jealous rival, who, as there is considerable reason to suppose, instigated the suit as a means of gratifying personal malice. It is not likely that any thing will result from the suit, except, possibly, a ventilation of the whole matter, which will be as creditable to one party as discreditable to the other.—*Medical Review.*

LIGATION OF THE INNOMINATE.—Mr. Mitchell Banks tied the innominate artery, on February 28th, at the Liverpool Royal Infirmary, for aneurism of the second portion of the subclavian. The common carotid was also ligated. Mr. Girdlestone's kangaroo tendons were used with strict antiseptic precautions. The patient improved rapidly, and has left the infirmary with his aneurism much better. This is the twenty-third case in which the innominate has been ligated; twenty-one proved fatal.—*London Lancet.*

ONE in three of the total population of London receives, yearly, gratuitous medical relief.

ARMY MEDICAL INTELLIGENCE.

OFFICIAL LIST of Changes of Stations and Duties of Officers of the Medical Department, U. S. A., from April 14, 1883, to April 21, 1883.

Wolverton, Wm. D., Major and Surgeon: granted leave of absence for four months, on Surgeon's certificate of disability. (Par. 7, S.O. 85, A.G.O. April 13, 1883.) *Shufeldt, Robert W.*, Captain and Assistant Surgeon, to report in person to the president of the Army Medical Examining Board, in session in New York City, for examination for promotion; on completion of which, will return to proper station. (Par. 10, S. O. 87, A. G. O. April 16, 1883.)

The Louisville Medical News.

Vol. XV. SATURDAY, APRIL 28, 1883. No. 17.

LUNSFORD P. YANDELL, M.D., - - }
L. S. McMURTRY, A.M., M.D., - - - } Editors.

A journal of Medicine, Surgery, and the Allied Sciences, published every Saturday. Price $3.00 a year in advance, postage paid.

This journal is conducted in the interests of no school, society, or clique, but is devoted solely to the advancement of medical science and the promotion of the interests of the whole profession. The editors are not responsible for the views of contributors.

Books for review, and all communications relating to the columns of the Journal, should be addressed to the EDITORS OF THE LOUISVILLE MEDICAL NEWS, LOUISVILLE, KY.

Subscriptions and advertisements received, specimen copies and bound volumes for sale by the undersigned, to whom remittances may be sent by postal money order, bank check, or registered letter. Address

JOHN P. MORTON & CO.,
440 to 446 West Main Street, Louisville, Ky.

KOCH'S DISCOVERY.

No advance in modern pathology has been subjected to more rigid criticism and painstaking investigation than the announcement by Koch, made several months since, of the discovery of the bacillus of tubercle and its bearing upon the pathology of phthisis. Investigators in this country and elsewhere with undue haste announced that there was an error in the observations of the distinguished German microscopist, and that he had mistaken ordinary histological formations for the micro-organism which had long been the object of search. Further investigations, however, have only confirmed the original announcement of Koch, and served to direct admiring attention to the care, ingenuity, and thorough methods which characterize his investigations. In the first number of the current volume of this journal we presented our readers with an able and instructive article by Professor Whittaker, of Cincinnati, prepared after a visit to Koch and careful personal examination of his preparations, in which the practical results of these researches were presented. In this issue a communication will be found from our London correspondent, one of the ablest members of the profession in England, which deals with the same topic. Another communication will appear next week, completing our correspondent's discussion of the investigations recently executed in England bearing upon this important topic. The researches of Koch have safely endured the criticisms of the most rigid investigators, and the indications are that he has made one of the most important of modern scientific discoveries. These researches are so far-reaching, and the relations of micro-organisms to tuberculosis is so important, that it is difficult to estimate the ultimate results of these studies upon the prevention and treatment of tuberculosis. We commend the article of our London correspondent to the careful attention of our readers as indicating the most recent and advanced investigations upon a most important subject. That much is yet to be done before the practical results of Koch's discovery are realized is evident; but that this discovery marks a new era in modern pathology seems beyond all question.

SMALLPOX.

The past winter has been notable for a wide-spread prevalence of smallpox in the United States. The greatest severity of the epidemic seems to have been expended in Baltimore, where it continues to prevail with severity, though it is evidently on the decline. New Orleans and many smaller communities in the South and West are now suffering with outbreaks of the disease. The lesson to be derived from these trying experiences is quite plain, but it seems is never learned; or, if recognized during an epidemic, has to be learned anew with each recurring outbreak. It is evident that to overcome the disease and prevent it, steps must be taken while the disease is in abeyance. When the disease is slumbering and is only heard of at distant foci, then preventive measures should be enforced with the same vigilance as when the epidemic is upon us. Thorough and universal vaccination, performed by and conducted under

the care of a competent medical man, should receive attention at all times. The danger of neglecting vaccination until the disease presents itself in an outbreak, when vaccination is hastily and often imperfectly performed, has been clearly demonstrated during the present American pandemic. The means of protection rest upon vigilance during the intervals of the outbreaks of the disease. Had the same attention been given to public vaccination during the interval between the epidemic of 1870–73 and the present epidemic as has been observed during the past year, the severe experience of the past six months would have been greatly modified if not altogether averted. Vaccination, constant, thorough, and persistent, will prevent a repetition of this disease.

THE LATE DR. VAN BUREN.

Dr. E. L. Keyes, of New York, in a recent memorial address before the New York Academy of Medicine, made an eloquent and graceful tribute to the memory of his dear friend and master, the late Dr. W. H. Van Buren. From this address we learn that at the time of his death this distinguished surgeon had in preparation a work on the Principles of Surgery. Few American surgeons have combined so happily and so ably the work of the scholar and practitioner as did Dr. Van Buren. His writings are remarkable for their practical character, their terseness and elegance, and the importance of the lessons taught. It is to be hoped that these papers referred to by Dr. Keyes will be given to the profession. The fidelity of the following picture, which we extract from the address, will be recognized by many of our readers:

> Dignity and grace vied with each other to find expression in his commanding figure—a figure rendered all the more imposing by his military training. The charm of his personal presence was equally apparent under all circumstances before men singly or collectively. The gravity of his counsel and weight of his judgment were most prized by his peers in consultation. The patient welcomed his coming with gladness, and without a murmur, in that entire confidence born of faith, yielded into his hands the issues of life and of death.
>
> The same personal magnetism was evident in his intercourse with students. Who can forget the swing of his supple figure as he entered the lecture-room of the old University in the glorious days of his pride, and the princely bow with which he saluted his class as the dome of the amphitheater resounded in responsive echo to their acclamations of appreciative reception. His later efforts at Bellevue were none the less gracious, and his white head and beard and the motions of his heavier frame made up in dignity what they lacked in fire.

THE HOLMES BANQUET.

The dinner given by members of the medical professon of New York City at Delmonico's, on the 12th inst., in honor of Dr. Oliver Wendell Holmes was a notable occasion, and marks an important event in the life of that accomplished physician, poet, literateur, and scholar. Two hundred and twenty persons were present, the company being composed of the most prominent physicians of the metropolis and several distinguished representatives of the other learned professions. Dr. A. H. Smith greeted the guest of the evening in verse, reading a poem which exhibits no little talent and much humor. Dr. Holmes replied with a poem of exquisite beauty and taste. The sentiment to the Clergy was responded to by Rt. Rev. T. M. Clark, Bishop of Rhode Island; that to the Law by Hon. Wm. M. Evarts; Literature was represented by Mr. George William Curtis; and the Press by Mr. Whitelaw Reid. Our space permits only the conclusion of Dr. Holmes's poem:

> How can I tell you, O my loving friends,
> What light, what warmth your joyous welcome lends
> To life's late hour? Alas! my song is sung,
> Its fading accents falter on my tongue.
> Sweet friends, if shrinking in the banquet's blaze,
> Your blushing guest must face the breath of praise,
> Speak not too well of one who scarce will know
> Himself transfigured in its roseate glow;
> Say kindly of him what is—chiefly—true,
> Remembering always he belongs to you;
> Deal with him as a truant, if you will,
> But claim him, keep him, call him brother still!

Bibliography.

A Manual of Gynecology. By D. Berry Hart, M. D., F. R. C. P. E., and A. H. Barbour, M. A., B. Sc., M. B. In two volumes. Illustrated with plates, lithographs, and wood-cuts. New York: William Wood & Co. 1883.

We have had frequent occasion to notice in these columns the monthly volumes of standard medical authors issued by Messrs. Wm. Wood & Co. The volumes before us are the two first numbers of the series for the current year. This library has from its beginning in 1879 enjoyed great popularity and has received the highest commendation. Beginning with one of the really great works in medicine of this century—Hilton on Rest and Pain—the selection for each annual series has been made with a judicious discrimination. The volumes issued for January and February of the current year indicate a progressive improvement.

The authors of this manual of gynecology occupy prominent positions in, and are fair exemplars of, the distinguished school of midwifery and gynecology of Edinburgh—a school founded, for the most part, by the late Sir James Y. Simpson, and made famous by his splendid scientific achievements. While this work may be considered an exposition of the teachings of this school of gynecology, the authors have exhibited the good judgment to utilize the researches and clinical observations of their confrères on the continent of Europe, especially in Germany, and in America. The reader has only to note the tabulated list of references at the opening of each chapter, in which he will see, in almost every instance, the familiar names of Sims, Thomas, Emmett, Peaslee, Goodell, Atlee, Bozeman, Battey, and Mundé, to realize that the authors know full well that America is the birthplace and nursery of uterine and ovarian surgery. While a faithful index of British, and, more particularly, Scotch gynecology, this work is based upon a thorough knowledge and recognition of the contributions of every worker in these fruitful fields of science, which have only been opened up during the present generation. The entire work is written in simple, lucid, and elegant style, and is thoroughly practical. It is more than a manual; it is a complete and exhaustive treatise. The work of the publishers deserves special mention. The typography and arrangement is superior, and the illustrations are numerous and excellent. The list of works for the current year is more attractive than in any preceding series, and is admirably adapted to the varying needs of the general practitioner. One can easily select four of the twelve volumes which are well worth the price of the entire set. This enterprise deserves the support of the profession, and we are glad to know that it is being cordially given.

The Thoracoplastic Operation of Estlander: Multiple and Extensive Resection of the Ribs over old and intractable Empyema Cavities, as a Means to effect their Closure. By Christian Fenger, M.D., Chicago, Ill. Reprint from the Medical News, September 23, 1882.

Ruptures of the Subpubic Portion of the Urethra: Select Topics on Modern Surgery, illustrated by Cases from Hospital and Private Practice. By Drs. E. W. Lee and Chr. Fenger, Chicago. Reprint from the Chicago Medical Gazette, February 5, 1880.

Nerve-stretching: Select Topics of Modern Surgery, illustrated by Cases from the Hospital Service and Private Practice of Drs. Christian Fenger and E. W. Lee, of Chicago. Reprint from the Journal of Nervous and Mental Disease, Vol. VIII, No. 2, April, 1881.

Six Cases of Aneurism: Select Topics of Modern Surgery, illustrated by Cases from the Hospital Service and Private Practice of Drs. Chr. Fenger and E. W. Lee, Chicago, Ill. Read before the Chicago Biological Society, February 1, 1882.

Opening and Drainage of Cavities in the Lungs. By Christian Fenger, M. D., and J. H. Hollister, M.D., of Chicago, Ill. Extract from the American Journal of the Medical Sciences for October, 1881.

Total Extirpation of the Uterus through the Vagina. By Christian Fenger, M. D., Chicago, Ill. Extract from the American Journal of the Medical Sciences for January, 1882.

Treatment of Chronic Nasal Catarrh. By J. Addison Stucky, M.D. Reprint from the Medical Herald, April, 1883.

Diphtheria: No. 2 of Preventable-disease Circulars of the Illinois State Board of Health.

Notes on Ottawa Unionidæ. By F. R. Latchford. Reprint from "Transactions No. 3," Ottawa Field Naturalists' Club.

Correspondence.

THE QUESTION OF THE SPECIFIC CONTAGION OF PHTHISIS.

[FROM OUR LONDON CORRESPONDENT.]

Since Koch first announced to the world his results as to the specific bacillus which, in his view, is invariably connected with the causation of phthisis, the attention of British pathologists has been continuously directed to this subject. Naturally his results were from the first scrutinized very closely, and there was an obvious and proper desire thoroughly to test both facts and conclusions before arriving at any opinion or accepting any theory. From the outset, however, his statements were presented with so much clearness, and his preparations, which many of our pathologists here had early opportunities of examining, were so carefully made, so defined and so convincing as to the scientific skill and logical precision with which Koch proceeds in his work, that the impression of our leading practical authorities has always been very favorable.

That the bacilli were actual morphological entities no one could for a moment doubt who repeated with care Koch's methods of culture by his dry process, or who studied the preparations which it was easy to procure from the sputa and the caseous matter of phthisical subjects; nor could any one who has a clear perception of the tendency of modern discovery fail to perceive how thoroughly his work coincides in its facts and the direction of its inferences with all that is sound and most progressive in modern pathology. On the other hand, it is equally clear that bacterial pathology is at the present moment surrounded with peculiar difficulties, owing to the minuteness of the organisms observed, to the facility with which sources of fallacy may pass unobserved, and with which accidental impurities may throughout long series of experiments be admitted unnoticed and vitiate the whole of the conclusions, or even themselves produce the results which the experimenter inadvertently attributes to his pet bacillus.

Mr. Watson Cheyne, one of our ablest young investigators, assistant surgeon at King's College Hospital, and the favorite disciple of Mr. Lister, has been commissioned, by the association established last year for the advancement of medical science by physiological research, to investigate Koch's results and to determine, as far as possible, their relation to the labors of previous and contemporary workers on the subject of the specificity of phthisis. For this purpose he has carried out a series of researches here, and has further visited the laboratories of Koch in Berlin and of Toussaint in Toulouse. In order to understand the very marked importance of Mr. Watson Cheyne's researches in determining the value of Koch's work and fixing its relations to our existing knowledge of the etiology and pathology of phthisis, it is necessary to glance retrospectively at the history of the subject for the last twenty years. This has an alarming sound, but the retrospect may be made quickly and without much waste of thought or words.

The modern history of this subject commences with the researches of Villemin twenty years ago. To recall Villemin's name is to remind any one, who is at all familiar with the history of modern pathology, of what seemed at the time one of the most striking and incredible of discoveries —an observation to the verification and confutation of which hecatombs of Guinea pigs and rabbits were sacrificed, without at the time arriving at any very distinct conclusion. Nevertheless the results were both important in themselves and, as is now seen, valid as pathological data, although neither their full meaning nor the means of avoiding fallacy in the course of the investigation were then in the possession of even the most advanced pathologists; indeed, to refer to Villemin's researches, and to study at the present moment their significance and their errors, is to bring vividly before our minds the evidence of enormous advance in our means of research and pathological knowledge made during this short period. Villemin, it will be remembered, alleged that conditions of disease resembling general tuberculosis were rapidly induced by the inoculation of animals with portions of phthisical lung or the pathological products of caseous pneumonia; on the other hand, in his experiments he found that when other pathological products were inoculated these tuberculous conditions were not produced, hence he concluded that tuberculosis was inoculable and was due to a specific virus. What was the nature of this virus or what the reasons of its specificity pathologists then could only guess at, but the speculation was hazarded that it was due to micro-organisms. Villemin's researches were extensively repeated, among others by

Burdon Sanderson and Wilson Fox in this country and by Waldenburg and Lebert on the Continent; their conclusions did not invalidate the positive results of Villemin, but they asserted as the result of further experiments that the introduction of other substances, and indeed almost any means of exciting pathological irritation, was seen to excite tuberculosis in some of the lower animals. Buhl followed with an attempt to reconcile the two conflicting sets of experiments and the two different views which result from them, by asserting that any caseous material and caseous pus can excite tuberculosis, and that so-called tubercle was nothing else than the caseous degeneration of inflammatory foci. Later, however, Cohnheim, in Berlin, put a different face upon these results. In the first instance, and working in his Berlin laboratory, Cohnheim had alleged as the result of his work that quite innocuous substances, such as cork or guttapercha, introduced into the abdomen of rabbits produced tuberculosis; but working later with Frankel, in Kiel, in a laboratory of which the atmosphere was pure and, as he believes, not impregnated as the Berlin laboratory and as most of the laboratories of Europe at this time were with infected matter floating in the air, and taking some of those precautions which the later progress of science had indicated as necessary to prevent the introduction of impurities, Cohnheim and Frankel as invariably failed to produce tuberculosis by any other means than by tuberculous matter as they before had succeeded, and they were forced to conclude that their former results were due to something in the condition of the laboratory. The most interesting and important experiments in this direction were subsequently made by Cohnheim with Salomonson, who introduced tuberculous matter into the anterior chamber of the eye, carefully excluding impurities and sources of fallacy; here the great advantage is that the actual growth and progress of extension of pathological substances introduced may be watched, and here it can be seen that the tubercle thus inoculated spreads from the iris to the choroid, and so invades the whole eye and subsequently infects the whole constitution. On the other hand, in no instance have these or any other observer, using due precautions, been able to inoculate tuberculosis by introducing any thing but tubercular matter into the anterior chamber of the eye. Thus it will be seen that the course of careful pathological investigation by the inoculating process had led the best observers independently to the conclusion that tubercle is truly specific; thus the experiments of Cohnheim and Salomonson prove the specificity of tubercle.

In 1877 Klebs read a paper at one of the German congresses in which he described micrococci, which he had cultivated from tubercle, and by which he stated he produced tuberculosis; when, however, those experiments reported by Schultzen and others who instituted control experiments, it was found that uniform results were not obtained, and it was evident the methods of experiment had been fallacious. In 1881 Toussaint, in Toulouse, published a very careful and elaborate series of investigation, in which he alleged that he had obtained, from the blood of tuberculous animals, a micrococcus which by successful cultivations in broth he could reproduce as a pure micrococcal growth in successive generations, and that by inoculating this micrococcus he succeeded in producing tuberculosis. It is, however, important to note that he only sometimes produced it. We come now to the announcement by Koch that he was able to demonstrate the presence of rod-shaped bacilli in human tubercle and in tubercle of animals; that he found these bacilli wherever tubercle was present; that he was able to cultivate them as a pure bacillus growth in blood serum in successive generations, and that by the inoculation of this pure bacillus he invariably succeeded in producing tubercle. It is unnecessary to repeat the details of Koch's discovery, his various methods of staining and demonstrating the bacillus, and the special methods of microscopical investigation and of physiological culture which he reccmmends; all this has been described in detail in your columns and elsewhere. There still remained, however, serious doubts, first, as to the truly specific and characteristic character of these bacilli; secondly, as to the statement that they were coexistent with tubercle wherever found; thirdly, that they were the only bacillus which were found capable of producing tubercle where inoculated; fourthly, that they were found in tubercle, not in closed cavities, and could not therefore be accidental introductions from the outer air.

Leaving the subject at this point for the present, I will in my next communication consider the observations of Klebs on micrococci, and then introduce your readers in detail to the investigations of Mr. Watson

Cheyne, altogether making the most important chapter in modern pathological inquiry. [TO BE CONTINUED.]

PLACENTA PREVIA.

Editors of Louisville Medical News:

I hope that the perusal of the following notes of a case of placenta previa may prove of service to some young practitioner, and not devoid of interest for older ones.

I had just received my diploma from Bellevue Hospital, and felt authorized to go into all the world and administer physic to every creature. I had listened to the eloquent George T. Elliot, and the wise and witty Fordyce Barker, and the garrulous Taylor, and felt sufficient for any obstetrical emergency.

I was asked shortly after to take charge of Mrs. Ward during her pregnancy and confinement. She was very fleshy, forty-five years old; her youngest child was twenty years of age. She had always had very tedious labors with a tendency to excessive hemorrhage. She had been suffering from an intermittent fever of the quartan type, which proved rebellious to treatment, she having taken as high as thirty grains of quinine at one dose by order of another physician. In the seventh month of pregnancy she had a severe attack of uterine hemorrhage, followed in the eighth by a similar one. These attacks left her very pallid and weak. I told her husband that I believed it would prove to be a case of placenta previa, and asked to be speedily notified when labor commenced. On being summoned I found my worst fears realized. The soft, pulpy lobes of the placenta covered every part of the opening cervix. Every pain would be followed by a torrent of blood, the woman would fall back fainting, the pulse would flutter, the pains cease until a little strength was restored. I endeavored to persuade the woman to allow me to introduce my hand, detach one side of the placenta and draw down some portion of the child to act as a natural tampon. As soon as I began to execute the maneuver the woman would draw back and refuse to allow further procedure. "The doctor was young and had better wait for counsel" was the advice volunteered by some other woman. The moral of this recital is that then and there I should have abandoned the case. The counsel asked for was away from home and had to be followed up, and for hours I sat listlessly by while the terrible hemorrhage went on. When the counsel arrived the woman was moribund, the pulse barely distinguishable, and in a few moments she died undelivered. It took me years to live down the stigma of that fatal case.

Query. Will you, Mr. Editor, or some other obstetrician of note, give me your opinion in this matter? A few days ago I delivered a woman by forceps of a male child. She was a primipara, thirty-one years old. The head presented in the occipito-anterior position. The pains were excellent, yet I waited four hours after the waters broke without finding the head to advance. The cord was wound thrice about the child's neck. The child was fairly lively at birth. Could this disposition of the cord retard delivery to that extent without cutting off fetal circulation?

LEVI CHASE, M.D.

IRVING, KANS., April 17, 1883.

SUPPRESSION OF URINE.

Editors Louisville Medical News:

In the number of the NEWS of April 7th is mentioned a case of suppression of urine lasting seventy-four hours, with recovery, and credited to the Lancet. Seeing the article brought to mind a case I attended and made a note of.

A. G., a maiden lady of forty-seven years, was taken, on Monday morning, with a severe pressure upon the top of the head, with nausea of the stomach, but no vomiting. Found her, on reaching her bedside, without fever or pain except as above stated. Inquiry developed the fact that she had not micturated since the evening before. The catheter was used, but no urine found in the bladder. The next morning she vomited a pint or more of fluid from the stomach, about the consistence of the white of an egg, of red color, and with slight ammoniac smell. This state of things continued unchanged until the following Saturday, a period of one hundred and forty-four hours. During this period there was no urine in the bladder, the catheter being used five or six times day and night. There was no deception on the part of the patient. On Saturday the catheter brought away about one ounce of urine, and it continued to increase in quantity until it became normal in appearance and quantity. With return of the urinary secretion the vomiting and pressure upon the top of the head ceased entirely

About a week after the return of the secretion my attention was called to a severe pain in the side. On examination I found a tumor about the size of a turkey-egg lying between the liver and right kidney. This tumor gradually increased in size to about double, when fluctuation was discovered. Two days after (Monday) she passed, by the rectum, about a quart of pus mixed with a small quantity of blood and fecal matter. Patient made a slow but good recovery, except that the body is bent forward and to the right. Previous to this trouble the lady had enjoyed good health.

J. BAKER, M.D.

SHELBYVILLE, KY.

POP-CORN, THE OLD REMEDY FOR VOMITING OF PREGNANCY.

Editors Louisville Medical News:

In the Philadelphia Medical and Surgical Reporter of February 17, 1883, T. C. Wallace describes pop-corn as a *new* remedy for the vomiting of pregnancy, and cites a case descriptive of how the remedy should be used. This same remedy is recommended by Dr. F. A. Burall, in the Medical Board, quoted in the Louisville Medical News, Vol. ix, No. 7, 1880, on page 83. Dr. Burall says: "It should be white and light, and eaten freely, sprinkled with salt." I had occasion to use the remedy in two cases, and found it of decided benefit. I however did not rely on it entirely, giving other remedies at the same time.

Dr. E. J. KEMPF.

FERDINAND, IND., April 12, 1883.

Selections.

VERY HOT VAGINAL INJECTIONS.—Concerning this subject, Dr. T. M. Cook, of Sandusky, Ohio, writes as follows to the American Journal of Obstetrics:

Some twenty-five years ago, when treating cases of this character, and finding hot water, alone or medicated, of great value, it became a matter of much importance how best to make the application to the uterus and surrounding parts and at the same time avoid the too great heat and even sense of scalding to the external parts by the discharge of the same as it passed off when thrown in by the ordinary vaginal syringe, or through any pipe attached to a hose or other apparatus conveying the fluid from a point above the patient to the parts by force of gravity. Not alone this inconvenience was experienced, but also that of the means to dispose of the fluid as it passed away. To obviate all this, I made use of a Nott's or similar trivalve vaginal speculum and one of Goodyear's long-pipe rubber syringes. I had my patient placed upon a cot or lounge (proper chairs not then being in use) on the back, with the hips somewhat raised above a level with the lumbar region, the knees well drawn up and separated, and feet so resting as to be easy in the whole position. Then, the speculum being introduced and so expanded as to increase the capacity of the vaginal parts sufficiently to contain from two to four ounces of fluid, the vagina was filled with the syringe, carrying from a half to an ounce, slowly, and by a very moderate action of the syringe. Commencing with the temperature at about 105° F., I gradually increased the same as it was comfortably tolerated, in the majority of cases to 125° F., and in many even to 135° F., and in one case to 140° F., without producing either congestion or inflammation. The latter temperature was used in cases of internal or interstitial uterine growths, also in enlargement of the ovaries from incipient cystic growths. Each sitting lasted from ten to twenty minutes, the water being constantly withdrawn and renewed by warmer water, with no sort of inconvenience or discomfort to the patient, or even wetting or soiling the clothing in the least. At last every drop was removed from the vagina before the patient rose to her feet, and in no case was there pain referable to the hot water. Pain occurred only in a very few cases, when the water was thrown with too great force directly into the os uteri.

This, you perceive, will conflict somewhat with Dr. Schenck's directions, viz., "not over 120° F." But I can readily understand why the doctor has been thus guarded. From the fact that the patient could not tolerate the scalding caused by the passage of the hot water over the external parts, which would be unendurable at a greater heat than he names, he enters this caution. If now the doctor, or any one who is desirous of receiving the greatest benefit possible from this means, has understood me, I have no hesitation in assuring such that they will find these vaginal baths of *very* hot water not only an excellent adjuvant, but more, one of the most potent means at our command for nearly all uterine complaints at all amenable to remedial measures.

THE RELATION BETWEEN RUBEOLA AND MORBILLI. (*Wien. Med. Blatt.*)—In 1874 Dr. Kassowitz expressed his opinion as against the existence of a specific rubeola, claiming that sufficient proof of it had not been brought forward. He now takes pleasure in reporting from his own observation an extensive epidemic of Rötheln, during which in no single case a transmission from Rötheln to genuine measles could be demonstrated. The symptoms and course corresponded with the descriptions of Emminghaus, one third of the cases showing very distinct enlargement of the cervical lymph glands. The contagiousness was undoubted, the incubation was between fourteen and twenty days. According to K.'s observations, rubeola is entirely distinct from morbilli, yet the resemblance is so apparent that he must confess that Rötheln stands closer to measles than any other disease known to us, and perhaps, he suggests, this resemblance depends upon some micro-organism as yet unknown. He supposes between measles and Rötheln, as between variola and varicella, some connection, but leaves the question undecided. The analogy between variola and varicella on the one hand, and morbilli and rubeola on the other hand, might perhaps consist in this, that *very exceptionally* from the infection of varicella variola might arise, from the infection of rubeola morbilli might arise. In a debate on this question in the London Medical Congress, Cheadle reported an epidemic of mild cases of rubeola closely followed by severe cases, which might have given rise to a suspicion of transmission of rubeola into morbilli. K. recalls, with a side glance at the micrococci, that the micro-organisms are made either benignant or malignant at the will of the experimenter. Variola and vaccinia, which, although their eruptions are so similar, are yet clinically so widely separated that they are always considered two different diseases, are in fact probably identical. Vaccine is variola virus changed by transplantation to another species of animal. He remarks that even the transmission of variola by variolation makes the disease more similar to vaccinia, in that it runs a milder course and the pustules occur only at the point of inoculation; on the other hand, vaccinia in children who suffer from an extensive moist eczema often, on the tenth or eleventh day, causes an extensive pustular development upon the eczematous surfaces, perhaps because the increased fluxion to the diseased portions of the skin carries a greater quantity of micro-organisms. "Let us, then, not be in too great haste to divide once and for all, from our present stand-point of scientific observation, the cord between rubeola and morbilli, and between variola and varicella."— *American Journal of Obstetrics.*

DIAGNOSIS OF FETAL POSITION.—M. Budin, in a communication made to the Biological Society concerning the position of the ova and fetuses in multiple pregnancy, stated that in twin pregnancy the position of the fetuses and their membranes may present three varieties. (British Med. Journal.) The first has been described in all the hand-books; the third has been mentioned by some authors; but the second has never been mentioned by any, although M. Budin states that it is by no means rare. If a vertical and transverse incision be made in a uterus from left to right, the two ova are seen placed side by side, one being in the right half, the other in the left half of the uterus; this is the first variety. In the second variety, observed in a similar preparation, the ova are placed one above the other; one occupies the inferior, the other the superior segment. In the the third variety, the same method of preparation shows one fetus occupying the ventral portion of the uterus, the other the dorsal portion; one is in front of the other. The first variety generally presents two placentæ, though sometimes only one; the membranes are always distinct. In the second variety, where the fetuses are superposed, there may be either one or two placentæ. In the third variety there are generally two placentæ, very rarely only one. Diagnosis is very difficult in all three cases; in the second it is more difficult than in the first; in the third it is almost impossible.

DIPHTHERIA.—Dr. Edward Woakes thus concludes a valuable paper in The Lancet, March 24th:

1. Diphtheria is an idiopathic inflammation, the peculiar type of which is imparted by previous exhaustion of sympathetic nerve force; that the loss in question occurs chiefly in children in whom the nutritional centers are normally in special activity; and that this exhaustion acknowledges chiefly climatic conditions possessing in themselves no other peculiarity than is implied in the tendency to lower the vital energy of the subjects exposed to them. The patient so circumstanced may be said to exhibit the diphtheritic diathesis. During its continuance ex-

posure to a slight exciting cause, such as a common cold, will suffice to develop a typical attack of diphtheria. Under these circumstances the disease may be said to arise *de novo*.

2. When the diphtheritic process is established, in whatsoever way it may be brought about, the element of contagium is introduced. Though not, perhaps, yet capable of exact histological identification, this is nevertheless a definite tissue element forced into rapid growth. In this state it is liable to be thrown off with the detritus of the process, and is capable of continuing its developmental energies, and of exciting a similar action in the corresponding tissues of another subject, if it come in contact with these, providing the subject be already predisposed to exert insufficient inhibitory nerve-power to resist the tissue demand for such an accession of blood as will suffice to feed the new process to the diphtheritic point. The latter quality resides entirely in the vaso-motor resources of the patient.

3. The explanation of the symptom of sudden death, occasionally witnessed in the disease, is shown to depend on a similar paresis of the nutrient vessels of the cardiac branches of the vagus as was seen to occasion the local lesions in the throat when affecting the vessels of this area. In consequence of the engorgement of the circulation within the nerve sheaths, and the jugulation thereby of the contained fibrillæ, the latter are unable to transmit inhibitory impressions to the heart, which accordingly ceases to beat after a continuance of rapid action has exhausted its inherent vitality.

THE TREATMENT OF SPERMATORRHEA.—Dr. H. Coupland Taylor writes, in the British Medical Journal:

Obstinate cases of spermatorrhea and frequent nocturnal emissions constantly come under the care of the practitioner. Too frequently the medical man consulted simply tells the patient that if he breaks off the pernicious habit of masturbation, which has probably originated his malady, he will soon quickly recover. But in fact, in most cases, the habit has already been abandoned before he comes to seek advice; and these cases do not get well for months or even years afterward, unless proper measures be taken. Knowing that he has left off this bad habit, and that he nevertheless does not improve, his complaint being made light of by the regular practitioner, and being greatly depressed in mind, he seeks the advice of the quack, who is always ready to benefit by these cases. I will give an outline of the treatment I have followed, and which I have found most successful in several such cases. The treatment should be, (1) Moral, (2) Hygienic, (3) Medicinal.

1. *Moral*—(*a*) The pernicious habit of masturbation, which has probably been the origin of the complaint, must at once be discontinued, or no good can result from any treatment. (*b*) The thoughts should be directed from himself by his having regular work and exercise. (*c*) The anxiety of mind which ensues should be allayed as much as possible and a happy state of mind instituted.

2. *Hygienic*—(*a*) The patient should have regular but not excessive mental employment, and bodily exercise in the form of walking, riding, or out-door sports and games. (*b*) Cold sponging of the genitals night and morning for some minutes, or as long as can comfortably be borne, is a most important agent in giving tone to the relaxed organs. (*c*) The patient should have a hard mattress, and as little and as light clothing as possible at night. Care should be taken not to lie on the back, which may be prevented by wearing a knotted towel over the spine, or by some other device. (*d*) No quantity of liquid should be taken before retiring to rest, and the bladder should be emptied the last thing.

3. *Medicinal*—A mixture containing tincture of perchloride of iron and tincture of nux vomica should be given twice or three times a day; also a pill containing a fourth or a third of a grain of extract of belladonna with three grains of camphor should be given at first every night, and then every other night, immediately before going to bed. If these lines of treatment be adhered to, the patient, whether suffering from real spermatorrhea or simply from frequently returning nocturnal emissions, will steadily improve, and the emissions will occur less and less frequently, till, in the course of a few weeks, or possibly months—for a malady of long standing (as this usually is) is never cured immediately—they will cease altogether, or only occur at such intervals as may be deemed normal, and in which there is no harm whatever.

ON PREVENTION OF LACERATION OF THE FEMALE PERINEUM.—(Alexander Duke, M. K.Q.C.P.I., British Medical Journal): The best authorities are agreed that it is not advisable to support the perineum when that

important structure is being distended by the passage of the fetal head. And the reason is sometimes given that the support is so seldom properly applied that it is better left undone.

The best preventive treatment of laceration that I have found (and which I dare not claim as original, though I find no notice of it in the text-books on midwifery) is this: When I find the head fairly engaged in the pelvis, and advancing with each pain, I take my seat by the patient's bedside, and having lubricated my left thumb, or the two first fingers of my right hand, I introduce either into the vagina, and on the onset of a pain draw back the perineum firmly but gently toward the coccyx, relaxing the tension gradually as the pain lessens till the next ensues, and so on till I can draw back the perineum with very slight effort. I thus tire out the muscular structure, and so produce sufficient relaxation for the head to pass.

In most cases so treated there is no danger of the perineum; but when the pubic arch is narrow (which can be easily determined) I take the additional precaution of raising the patient's left hip and supporting it on a hard pillow, while the shoulders are kept low, fomenting the parts, using inunction of lard or vaselin, and taking particular care to direct the head forward by pressure, with my left hand below the coccyx, or a finger in the rectum, leaving the perineum untouched. It has always seemed anomalous to me that the perineum should be expected to dilate on such short notice, namely, "the process of extension," while dilatation of the os and cervix occupy such a considerable time, even with the additional help of nature's hydrostatic dilator, viz., the bag of waters.

The drawing back of the perineum produces no additional pain to the patient, as it is done during a uterine contraction; and I feel sure that, if nurses and students were educated as to the proper way of preparing the perineum previously to its distension with the presenting part, we should see and hear less of lacerated perineum.

DILATATION OF THE NECK OF THE UTERUS.—M. Chassagny, of Lyons, in a communication made to the Paris Academy of Medicine, describes his method of thoroughly plugging the vagina, and producing rapid dilatation of the neck of the uterus. He places in the vagina a bladder with which an india-rubber tube is connected; this, with the help of a siphon, conveys into it the water contained in a receptacle placed about two feet and a half higher than the pelvis of the patient. The bladder becomes distended by the water and soon fills the vaginal cavity. This brings on abundant secretion, and induces energetic contractions, resulting in the physiological dilatation of the os uteri, which is quickly completed by the mechanical action of the bladder. The bladder is placed in the vagina, and the occlusion of the vulva is obtained by means of an apparatus which M. Chassagny calls the *Elytroptérygoïde* (wings in the vagina). It consists of a cylindrical speculum which holds the bladder; this is forced out as the water enters, and the act of distension separates the valves of the speculum, which, resting on the sides of the pelvis, prevent the expulsion of the apparatus and of the bladder. M. Chassagny mentions, in his pamphlet, several instances of the induced premature labor in cases of contracted pelvis, obstinate vomiting, eclampsia, etc. M. Chassagny describes two cases of vicious insertion. In both cases he induced labor before the natural period by having recourse to rapid dilatation. There was not the slightest hemorrhage, and two little infants were born. In another case, where the mother was in the last stages of suffocative catarrh, M. Chassagny effected in half an hour the safe delivery of a living child. The mother rallied for a few moments only. In *post-partum* hemorrhage the bladder, by completely filling the uterine cavity, closes the openings of the vessels, and, by artificially restoring the pregnant state, determines uterine contraction. The water in the bladder slowly flows away until the uterus is thoroughly contracted.

A CURE FOR CORYZA.—M. Gentilhomme, of Rheims, recommends as a cure for a cold in the head one quarter of a milligram of the sulphate of atropine. (*L'Union Méd. et Sci. du Nord-Est.*) It should be taken as soon as possible after the symptoms declare themselves. In a quarter of an hour after taking the distressing symptoms begin to abate. If necessary, in a few hours the dose may be repeated.

SACCULATED BLADDER.—Out of nearly three thousand autopsies at Guy's, there were twenty cases of sacculated bladder, eleven caused by stricture, five by stone, two by spinal disease, one by enlarged prostate, and one through epithelioma.